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ABSTRACT

To aid vocational educators in establishing interorganizational linkage and coordination with business, industry, and labor with the goal of improving instructional, learning, and work experience arrangements for their students, this monograph provides three products of a project to design and implement a model for program linkage and coordination. (An executive summary of the project is provided. The final report is available as CE 024 329.) Section 1 describes and defines linkage concepts and presents a generic model for linkage. Section 2 consists of a case study of a public postsecondary education linkage program involving the Community College Centers of the San Francisco Community College District, the Presbyterian Hospital in San Francisco, and the Far West Laboratory for Educational Research and Development. The study relates the activities of that program to the processes outlined in the model. (A companion monograph concerned with linkage of private institutions with business, industry, and labor is available as CE 024 327.) Section 3 includes an implementation guide to linkage followed by three linkage phases explicated in the model: (1) prelinkage activity, (2) linkage for the design of coordinated arrangements, and (3) formalized coordinated arrangements. This guide also contains a supplementary guide to evaluation. (Author/YLB)

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A MODEL, CASE STUDY, AND IMPLEMENTATION GUIDE FOR THE LINKAGE OF VOCATIONAL EDUCATION PROGRAMS IN PUBLIC POST-SECONDARY INSTITUTIONS AND BUSINESS, INDUSTRY, AND LABOR: A MONOGRAPH

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INSTRUCTIONAL AND TRAINING SYSTEMS PROGRAM

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PREFACE

This monograph intends to serve the needs of vocational education leaders who wish to consider establishing interorganizational linkage and coordination with business, industry, and labor with the goal of improving instructional, learning, and work experience arrangements for their students.

The monograph contains three major sections. Section I describes and defines linkage concepts and presents a Generic Model for Linkage. Section II consists of a Case Study of a public post-secondary education linkage program. The study relates the activities of that program to the processes outlined in the model. An Implementation Guide to Linkage is included in Section III. This Implementation Guide also contains a supplement dealing with the Evaluation Process.

The Executive Summary following this Preface provides a brief description of the project from which these materials evolved. The reader is referred to the Final Report* for a more detailed description of the organization and activities of the project.

There is also a companion monograph which describes the model and case study, for the linkage of a private post-secondary vocational education institution with business, industry, and labor.

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*Banathy, Bela and others. Building Models for the Linkage and Coordination of Vocational Education at Public and Private Post-Secondary Schools and Business, Industry, and Labor, Final Report. San Francisco: Far West Laboratory for Educational Research and Development, 1978.

TABLE OF CONTENTS

PREFACE ii

TABLE OF CONTENTS iii

EXECUTIVE SUMMARY iv

SECTION I: A GENERIC MODEL 1

SECTION II: A CASE STUDY 11

SECTION III: A LINKAGE GUIDE 35

BIBLIOGRAPHY 62

APPENDICES 63

Appendix A: Description of the Medical Assistant Program . . A-1

Appendix B: Description of the Volunteer Services Program. . B-1

Building Models for the Linkage and Coordination of Vocational Education at Public and Private Post-Secondary Schools and Business, Industry, and Labor

(7/1, 1976 - 6/30, 1978)

EXECUTIVE SUMMARY

The project reported here was supported by a grant from the Research Branch of the Bureau of Occupational and Adult Education, Office of Education. In carrying out the project the Far West Laboratory for Educational Research and Development established coordinated relationships with (1) the San Francisco Community College Centers, representing the public post-secondary vocational education sector, and (2) the International Institute of Food Industries in the Monterey Peninsula, representing the private post-secondary sector.

Based on a study of interorganizational linkage and coordination, the project focused on the design and validation of models for the linkage and coordination of vocational education at public and private post-secondary institutions with business, industry, and labor. The general procedure followed was to adapt organizational linkage and coordination models derived from an analysis of relevant research and literature. The adaptation was accomplished through the following stages: (1) describe goals, content and organizational characteristics of selected post-secondary vocational education programs and the goals, occupational programs, and organizational characteristics of identified selected organizations in business, industry, and labor; (2) determine the degree, scope, and intensity of congruence and compatibility of these groups through a comparative analysis of institutional goals, programs, and organizational characteristics; (3) design alternative configurations of program linkage and coordination, and select the most

promising configuration(s); (4) construct a model for program linkage and coordination; (5) specify vocational and work experience and relevant curricula, means, methods, procedures, and resources by which to implement linkage and coordination; (6) develop specific linkage and coordination plans and make arrangements for implementation; (7) implement the program, test and assess the program's impact, and make adjustments as indicated by the assessment; and (8) report the findings.

The overall result of the project was the design, description, and documentation of models for linking and coordinating post-secondary vocational education with business, industry, and labor. The generic characteristics of the models were defined and described in order to make the models applicable for use in a variety of educational settings in communities across the nation. It is anticipated that the overall impact of the use of the models will be more understanding, capability, and willingness among personnel to create linkage and coordination of vocational education with business, industry, and labor.

Four documents were produced:

- Building Models for the Linkage and Coordination of Vocational Education at Public and Private Post-Secondary Schools and Business, Industry, and Labor: A Final Report
- A Model, Case Study, and Implementation Guide for the Linkage of Vocational Education Programs in Public Post-Secondary Institutions and Business, Industry, and Labor: A Monograph
- A Model and Case Study for Linkage of Vocational Education Programs in Private Post-Secondary Institutions and Business, Industry, and Labor: A Monograph
- Building Models for the Linkage and Coordination of Vocational Education at Public and Private Post-Secondary Schools and Business, Industry, and Labor: A Brochure

SECTION I

A GENERIC MODEL

Introduction

In this section, we present descriptions and definitions of key linkage concepts and outline a generic model for the linkage process. It should be noted that the generic model is presented in order to detail a process that has potential applicability in the creation of cooperative, coordinated arrangements (linkages) among a variety of formal and nonformal educational agencies.* The purpose of these linkages is to foster increased instructional/learning resource capacity able to respond to the needs of the learner in the most effective and efficient way.

Key Linkage Concepts

Definition of Linkage

An initial definition of linkage consists of the following:

A linkage is any arrangement between organizations that requires mutual coordination and/or exchange of resources and activities.

This is a very general definition. Many of the activities that vocational education programs have been engaging in for years would fit within this definition. For instance, conducting field trips in local industries would be the result of a linkage activity.

From the standpoint of a linkage arrangements to expand education, the difficulty with these types of activity is their looseness. They are usually

*The Case Study presented in Section II illustrates an application of the generic model in an actual field setting with a public post-secondary vocational education program. The Implementation Guide in Section III is based on both the generic model and the case study.

carried out on an informal, ad hoc basis and are not usually executed in a way that anticipates the future needs of learners. They may also lack institutional commitment. More importantly, they do not as a rule serve the purpose of creating a structural relationship among agencies that increases their potential to respond to the needs of the people they serve.

Thus, we suggest a tighter definition of linkage.

A linkage is a negotiated, authoritative arrangement between organizations (in the case of this generic model, between formal educational agencies and other agencies in an expanded educational space) whose internal components allow for mutual coordination and/or exchange of resources or activities. The expressed purpose is to achieve not only each organization's goals and objectives, but also to achieve the mutually-defined goals and objectives that arise from the linkage process.

This definition implies that linkage is a conscious process requiring participating organizations to formally sanction the explicit details of goals and objectives. It should be pointed out that while the linkage activity must satisfy some portion of each organization's needs or goals, these goals or needs do not have to be identical. From the standpoint of the formal educational system, linkage activities can satisfy educational or instructional goals. On the other hand, from the standpoint of the other participating organization, linkage activities can satisfy a wide variety of goals, including those oriented towards education, public service, or personnel sectors.

For instance, a linkage arrangement (as we have defined it) between a vocational education program and a local business or industrial organization may satisfy a different set of needs for each. The school program's use of an industry's facilities and personnel may satisfy a need for obtaining an additional, relevant curriculum or instructional resource, and the industry

may be satisfying its own need for reaching potentially qualified, trained personnel or for fulfilling a public service obligation to the community.

In addition to satisfying each organization's goals or needs, the linkage process also entails the explicit identification of goals and objectives (and the procedures and structures to meet these goals) for the linkage activity itself. Hence, in order to ensure that the linkage activity or arrangement is successful, conscious planning must occur that will result in an additional set of goals and objectives that will be unique to those engaged in the linkage process.

Organizing Concepts: Holism and Transformation

We propose two organizing concepts which will guide our development of linkage in regard to the educational setting. The first of these is to view linkage from a "holistic" perspective. That is, as organizations engage in linkage, decisions that are made at one level affect other levels within the organizations. Even when only one component of an organization is involved in actual linkage related activities, the organization as a whole is effected. Moreover, characteristics of the participating organizations affect the linkage activity. In addition, the environment in which each organization operates will also affect the linkage process, and the linkage affects the environment.

One final, important consequence of viewing linkage from a holistic viewpoint is that it suggests that conflict may occur in the linkage process. Conflict can be expected to arise precisely because each organization is operating as an independent whole with its own unique needs, goals, and methods of operation. Conflict is not necessarily to be avoided, it can be a powerful vitalizing force for linkage. The linkage procedures must, however, anticipate and be able to deal with conflict creatively.

The second organizing concept involves the notion of linkage as a transformation process. As indicated earlier, linkage entails a negotiated, authoritative arrangement between organizations. This arrangement will result in a change or transformation of the structure, personnel functions, or resources of each organization. Transformation is necessary if the linkage activity is to lead to a formalized cooperative arrangement which will be sustained on a permanent, continuous basis. Without this transformation linkage-type activities will continue to be carried out in an informal ad hoc fashion.

Role of Independent Linkage Agency

Up to this point, we have suggested that linkage occurs between two or more independent organizations, with overtures being initiated by one organization and transmitted to another. There is, however, another alternative. Linkage could be facilitated by a third party--an independent, relatively neutral organization. Although there is relatively little precedent for a third party facilitating the linking of organizations for educational purposes, this type of coordinating agency is relatively common in the health care and social welfare delivery systems. Benson (1974), in reviewing the literature for applied modes of coordination for welfare agencies, suggests that a third party can influence cooperative interorganizational coordination. Thus, much of the literature we considered in deriving a model applicable to educational systems was drawn from the health and social services fields.

Roles in Linkage-Related Activity

Although linkage has been discussed as occurring between organizations or institutions, it must be understood that the actual coordination, planning, decision-making and implementation activities are carried out by people.

These people represent the institutions and in this capacity commit the institutions to do more than they, as individuals, can do. When a third party enters the picture, another group of individuals is involved. Thus, we suggest that two distinct categories of individuals, each with differing roles, are involved in the linkage process:

a. Boundary Personnel: These individuals represent the participating organizations and as such have the authority to go beyond each organization's limits or boundaries to perform communication and negotiation roles regarding the linkage process. A number of individuals may be included in the boundary personnel from each organization. One of these individuals should, however, be appointed as Coordinator. It will be the responsibility of this individual to coordinate the linkage process within the participating organization.

b. Linking Facilitator: The linkage facilitator represents the third party who may play a role in initiating and maintaining the linkage arrangement. As a result, the facilitator must possess the skills to analyze organizations, design linkage arrangements, and provide the framework for implementation of these arrangements. The linkage facilitator may also provide training for boundary personnel, particularly the linkage coordinator, so that planned activities can be carried out effectively. (Note: The question of support and source of authority for linkage facilitators in the educational setting is an important issue that has not been fully explored.) If a third party facilitator is not present, we suggest that one or more persons will assume the responsibilities of this role.

Costs and Benefits of Linkage

Although we are suggesting that the long-range benefit of linkage-related activities would be to expand the systems space of education, on a short-term basis there are a number of costs and benefits that each organization must consider in the linkage process. A list that was developed by Beal and Middleton (1975) follows. It has been adapted to illustrate possible costs and benefits from an educational agency's perspective. Since any one of these costs and benefits may provide powerful motivation for an organization to enter into or avoid linkage, they might best be dealt with by a third-party facilitator.

Benefits (potential)

a. The maximization, optimal use of, or expansion of the resources base. (Resources may include money, physical facilities, equipment, supplies, publications, services, administrative staff, paraprofessionals, volunteers, and available knowledge and skills.)

b. The reduction of overlap or duplication of programs or activities.

c. The enlargement of the scope of present programs.

d. The ability to reach new and different groups of people, including students.

e. The creation of programs with stronger impact.

f. The coordination and integration of each organization's input into a larger program with greater impact.

g. The elimination of mistrust, competition, and conflict.

Costs (potential)

a. The loss of a certain degree of autonomy.

b. The time and energy necessary to initiate and maintain linkage.

c. The possibility of experiencing difficulty in determining benefits.

d. The possibility of confusion as to who should take credit for success or failure.

e. The possibility of exposure of organizational weaknesses.

It should be noted that additional costs and/or benefits more directly related to the specific organization participating in linkage may be identified. The linkage facilitator must be able to analyze the possible costs and benefits, to inform the participants, and to suggest strategies for dealing with those that present barriers to linkage activity.

Evaluation and the Linkage Process

One other concept--evaluation--is important when considering the linkage process. As can be seen in the following procedural model, evaluation is listed as a separate step in this process. One of the primary purposes of evaluation, as indicated by its placement in the model, is to obtain information about the effectiveness of the linkage arrangement. Evaluation activities, however, must be carried on throughout the linkage process.

In addition to providing information satisfying to all parties about the effectiveness of linkage arrangements, evaluation activities should also focus on an assessment of the evaluation design process. Evaluation activities can also provide information about what activities have (or have not) taken place throughout the linkage design and try-out process. This information facilitates accountability and cost-benefit analysis.

The Linkage Process

In this section we present an image of a procedural model for the linkage process. The steps outlined in the model are developed from the perspective of the third party linkage faciliator. The steps, however, could presumably be adapted to a linkage process in which no facilitating agency or person is involved. The sources we have used to describe the linkage process include:

- The experiences of the Iowa State University Department of Sociology and Anthropology group as reported in Creating Organizational Coordination: Project Report (1975) by G. Klonglan, J. Winkelpleck, C. Mulford, and R. Warren.
- The professional development materials prepared by the East-West Communication Institute: Organizational Communication and Coordination in Family Planning (1975) by G. Beal and J. Middleton.
- The literature review and evaluation of the experiences carried out by Far West Laboratory staff while working on various linkage projects.

Three Phases

Phase I. Pre-Linkage Activity (can be carried out by facilitator meeting separately with organizations):

1. Define the problem or focal area to be addressed
2. Specify the set of organizations with the potential to deal with the focal area.
3. Meet with organizations to ascertain interest.
4. Determine which organizations will participate and obtain commitment or organizations to enter linkage negotiation.

Phase II. Linkage Activity (carried out in groups meeting with boundary personnel):

A. Linkage Design

1. Arrange for group meetings with boundary personnel.
2. Outline linkage approach and roles (conduct any training needed).
3. Outline general task environment of each organization, including:
   - goals,
   - resources,

- functions/activities, and
- structure.

4. Analyze the specific task environment of each organization relative to the linkage problem, including:
   - goals/objectives,
   - resources,
   - functions/activities, and
   - structure.
5. Specify any constraints, limitations or unique situations that may affect the linkage process.
6. Based upon previous discussion, design one or more linkage configurations. (Note: This activity can be carried out by the facilitator, independent of the larger group.)
7. Select one or more linkage configurations for implementation. This decision is based on:
   - goals/objectives for each implementation configuration,
   - standards for the quality of the linkage program, and
   - structures, roles, and responsibilities needed to attain goals and objectives.
8. Set up communication/feedback channels needed to implement linkage and to monitor progress.
9. Set up evaluation parameters and procedures.

(Note: Regarding points 6-9. The selected linkage configurations may require cooperation or specific activity from additional individuals within each organization. The linkage coordinator or boundary personnel

from that organization must ensure that cooperation, skills, resources, and communication channels are present. Additional training may be required.)

B. Linkage Try-out and Evaluation

10. Implement linkage try-out.
11. Provide evaluation feedback (formative and summative).
12. Decide whether to continue linkage arrangement (adjustments may be required).

Phase III. Formalized Cooperative Arrangements

The initial trial cycle of the linkage activity, as well as adjustment of the activity based on evaluation information, should lead to a formalized cooperative arrangement between the participating agencies. As a final step, the linkage facilitator would theoretically withdraw as an integral part of this arrangement. The experience base, from which we can draw conclusions about the disappearance of linkage facilitators from the system, is extremely limited. In the health and social welfare fields, linkage activities usually continue under the umbrella of some form of coordinating agency. This may or may not be the case in the educational setting.

Steps required to establish formalized cooperative arrangements include the following:

1. Negotiate and formalize coordinated arrangements.
2. Plan a long-range program for interorganizational coordination and linkage and for the management of such a program.
3. Implement and monitor the program.

SECTION II

A CASE STUDY

Introduction

This section will present a study and an analysis of the linkage project engaged in by representative staff of the Community College Centers of the San Francisco Community College District, the Presbyterian Hospital in San Francisco, and the Far West Laboratory for Educational Research and Development (FWL). The activities described in the case study exemplify the model presented in the previous section. It is expected that the description of these activities will help to reduce the level of abstraction of the generic model.

Context for the Linkage Case Study

Prior to presenting the case study, it is helpful to describe the context of the linkage case study. One of the major goals of the FWL was to design a generic linkage model for a public post-secondary vocational program and to develop a guide to the linkage process. The Community College Centers of the San Francisco Community College District agreed to participate in project activities. The administration of the Centers had decided that, due to increasing enrollments, the programs of the Allied Health area needed special attention. The Medical Assistant Program (MAP) was seeking change to improve their offerings to students and were responsive to the approach outlined by the FWL project staff and was selected as the program with which to work.

Once the decision to work with the MAP was made, the FWL project staff, in conjunction with the staff of the MAP and the Centers, initiated the linkage process. Linkage concepts, already defined by project staff, formed the basis for the participating organizations to develop linkage. Using these concepts

as a guide and a rough model, then, a linkage program was designed to meet the needs of the linkage arrangements. This model was then revised and refined as a result of the experience of the project staff in working with the MAP.

In reviewing the case study, the reader should keep the following definitions in mind:

- Linkage: A negotiated, authoritative arrangement between organizations whose internal components allow for a mutual coordination and/or exchange of resources or activities.
- Boundary Personnel: Individuals representing the participating organizations having the authority to perform communication and negotiation roles regarding the linkage process.
- Linkage Coordinator: Each organization may be represented by a number of boundary personnel. One of these, however, should have the responsibility for coordinating the linkage process within the represented organization.
- Linkage Facilitator: An individual having the responsibility to initiate linkage and to maintain the linkage process. In this study, FWL project staff assumed the Linkage Facilitator role.

Case Study: The Three Phases

The case study is structured according to the three phases of linkage described in the model.

Phase I: Pre-Linkage Activity

The purpose for this phase of activity is to determine a focus for the linkage activity and to select the group of organizations with which to work.

1. Define linkage problem or focal area.

After determining which program would be involved in linkage activities, a pre-linkage design team conducted a thorough program analysis. Members of this team consisted of the Linkage Facilitator, the Linkage Coordinator, and one Boundary Personnel person representing the MAP. (A description of the MAP is included in Appendix A.)

The purpose of this anlysis was to determine which aspects of the program would most benefit from linkage. Three aspects were considered seriously. These were program resources, e.g., medical equipment and library materials; curriculum content; and internship work experience.

To help them determine the specific aspect upon which to focus, the staff expressed the desire to establish a Program Advisory Committee. The issues of greatest concern to be discussed with the Advisory Committee included: (1) the needs perceived by hospital personnel and physicians regarding the skills and training most desirable in medical assistants, (2) general opinions regarding the quality and effectiveness of the training provided by the program, and (3) recommendations for that aspect of the program which would benefit most from linkage arrangements.

The MAP staff felt that advice from practicing medical professionals would provide the most enlightening and practical responses to these issues, hence an Advisory Committee composed of representatives from the San Francisco medical community was established. On May 10th, the linkage project staff and MAP staff met with the twelve Advisory Committee members.

Although the focus for this meeting was the content of the MAP program and the Advisory Committee's needs in the medical assistant area, the linkage project staff also explained linkage concepts to the Advisory Committee members. The committee members were then asked to complete a questionnaire regarding their knowledge about current connections between medical educational programs and medical facilities. They were also asked for their opinions concerning the aspects which might be the most likely to benefit from linkage arrangements. The participants generally agreed that the program's internship procedures (or work experience component) appeared to be the aspect in greatest need of attention.

In order to receive a certificate from the MAP program, students were required to assist in a hospital or doctor's office for a total of 140 hours. It was often left to the student to arrange for this on-the-job experience. Employers frequently had little or no contact with the program, therefore evaluation of the student's performance was sporadic. Generally students were reporting their activities to the program with minimal substantiation from their employers. The program staff wanted more accountable evaluation of this aspect of the students' education, and they desired a higher degree of uniformity of the students' experiences in the external settings. That is, it was thought highly desirable to establish and maintain greater control over student internship, allowing the creation of standards for evaluation and accountability of the students' experiences.

This would also provide an opportunity for program staff to increase their contact with work situations. They could gain information concerning the kinds of skills most valued in medical assistants and, hence, adjust curriculum, thereby improving their students' chances in the job market. They would also learn the kinds and levels of skills most appropriate and helpful to students beginning on-the-job training.

The possibility of increasing the benefits of the program--by focusing on internship as that aspect of the program most suitable to linkage--appeared substantial. Furthermore, various members of the Advisory Committee indicated that they would be interested in at least investigating the possibility of increasing the internship experiences their organizations currently provided students.

According to the linkage concepts proposed by the FWL project staff, defining

the problem at this level of specificity was entirely appropriate at this stage. The organization desiring linkage, Community College Centers, had with the help of the facilitating agency, Far West Laboratory, defined a focal area which could benefit from linkage: the internship aspect of the Medical Assistant Program. In reaching this decision, the linkage staff, and subsequently the MAP staff, had completed a thorough program analysis. The analysis provided substantial information which would be useful in approaching potential organizations with which to link. Furthermore, the formation of the Advisory Committee provided contact with twelve practicing professionals in the medical field. Theoretically, at least, this contact could be helpful in gaining entry to organizations with potential for linkage.

2. Specify the set of organizations with potential to deal with focal area.

After deciding to work on the internship component of the MAP, it was then important to specify the set of organizations with linkage potential. The purpose of including an internship experience in a students' program is to expose the student to a real world job setting. It is hoped that the experiences gained by the students during this exposure period would later be useful to the student when applying for a job in the field. Thus, those organizations with linkage potential were fairly obvious: hospitals, clinics, and private physicians' offices in the San Francisco Bay Area.

3. Meet with organizations to ascertain interest.

The meeting of the Advisory Committee also served as a preliminary meeting with several organizations having the potential to deal with the student internship experience. The linkage staff also arranged meetings with appropriate people within the medical facilities where students had been taking

their internships, and explained the linkage project, the Medical Assistant Program, and the particular need to strengthen students' internship experience. The explanation of linkage concepts made it clear that the program required enough organizational commitment to provide representatives with the time and resources necessary for full participation. Further, it was explained that specific benefits could not be promised at an introductory meeting, but it was stressed that inherent in the linkage concept is the idea that participating organizations will benefit from the linkage process and its outcomes. Examples of such benefits for participating organizations were increased access to appropriately skilled employees and fulfillment of a public service need.

The organization's perception of and attitude toward linkage are important to the success of linkage. Linkage arrangements become extraordinarily difficult if organizational support consists of only verbal endorsement of the concepts. Support should also extend to time and resources for representatives to participate completely without imposing excessively on their non-working hours. When the organization contact expressed doubts concerning, for example, the possibility of benefit to their organization, or the likelihood of positive organizational receptivity to the linkage concepts, linkage with that organziation was considered inappropriate.

4. Determine which organizations will participate and obtain commitment to enter linkage negotiation.

After careful review of the results of the meetings with various agencies, San Francisco's Presbyterian Hospital of Pacific Medical Center appeared to present the most suitable complement to the MAP for negotiating linkage

arrangements. The linkage staff, in conjunction with the MAP staff, selected Presbyterian Hospital because of the following: (1) the hospital staff expressed an interest in designing a linkage program; (2) staff appeared to be available to participate; (3) the hospital administration appeared to support linkage concepts and activities; (4) the belief that improved internship arrangements would produce substantial benefits to the hospital. (MAP students had been receiving credit for internships taken at Presbyterian Hospital, but as mentioned earlier, the internships were loosely structured.)

Having established, with formal hospital administration approval, that Presbyterian would participate in the linkage process, the hospital administration then had to determine which area within the hospital would be directly involved. The three departments being considered were the Education and Training Division, the Personnel Division, and the Volunteer Services Division.

Because students were not required to gain specific educational competencies from their internship experience, the Education and Training Director deemed that division inappropriate for involvement in the linkage. The Personnel Division was considered for participation with the idea that, following internship, students may then move into permanent hospital positions. However, the Peronnel Director indicated that the hospital generally had so few openings that the possibility for students to achieve this were minimal.

The Volunteer Services Division was seen as the most logical department for participation in the linkage. (A description of Volunteer Services is included in Appendix B.) The Division Director described the goals of Volunteer Services, and they appeared to coincide with what the restructured MAP internship hoped to accomplish. For example, Volunteer Services hoped to improve its image by developing a larger corps of quasi-professionals capable of

serving in a number of areas in the hospital. The MAP could complement this by providing students whose classroom experience exposed them to paraprofessional-level skills, including the use of office machines and medical equipment, which would prepare them to work in a number of areas within the hospital. In addition, Volunteer Services personnel were covered by liability insurance, a benefit not available through other hospital departments.

These discussions among linkage staff, MAP staff, and hospital staff indicated that, if the organizations involved negotiated with each other to determine balanced ways of sharing resources, each organization could benefit.

Phase II: Linkage Activity

Linkage activity consists of designing and implementing a coordinated program. A thoughtfully designed program eases implementation. This is not to say that implementation follows naturally with little effect on the part of participants. It does mean, however, that if participants are resilient in their responses to the events of implementation, all can run relatively smoothly. Clearly then, a well-designed program effects implementation efficiency. Thus, Linkage Activity in this phase consists of two major components: linkage design and linkage try-out.

1. Arrange for meetings with boundary personnel.

The preceding phase of activity had resulted in the decision that a linkage arrangement would be developed between the MAP and the Volunteer Services Program of the Presbyterian Hospital. As a first step in designing this linkage arrangement, meetings were arranged between all parties concerned. These

parties consisted of the Linkage Facilitator, Linkage Coordinator, and appropriate boundary personnel representing the respective programs. This group of individuals was referred to as the Design Committee.

Group meetings with everyone present--certainly desirable--were not always possible. Because of scheduling conflicts, the Linkage Facilitator sometimes met separately with the boundary personnel from each organization.

2. Outline linkage approach and roles.

The objective of linkage is to design (and implement) an arrangement utilizing the resources of each organization. The linkage is designed so that each organization will better meet its goals. The linkage arrangement, however, has its own goals and each person plays a role in meeting the goals of the linkage arrangement. Thus, a crucial element in the process is the design of the linkage in that the specific arrangement implemented truly meets the needs of, and is compatible with, the operations of each organization. During the first meetings of the Design Committee it is helpful to review the meaning of linkage and the respective roles expected of each participant.

In the case of this particular program, insufficent time was devoted to outlining a general linkage approach. For a variety of reasons, the general tendency of the group was to focus immediately on what specific steps should be taken to improve communication between the MAP and Volunteer Services regarding the student internship experience.

As the project progressed, it became apparent that linkage was still something of a mystery to the participants. The participants appeared to be under the impression that they would simply be told what to do to smooth out the difficulties existing in the internship arrangement. It was not

clear to them that the linkage activities included designing a program with the potential to be significantly different from the internship connections they had had in the past. Nor was it clear that the use of those concepts provided the potential to do far more than simply smooth out previous trouble spots.

It became clear that the linkage concepts should have been more carefully explained at the very beginning of the endeavor, and should have been continually referred to throughout. In an attempt to correct this situation, the linkage facilitator took a direct leadership role in preparing lists of tasks, responsibilities, and a calendar of activities for the project.

During the initial Design Committee meetings, it would also have been beneficial to specify, as far as possible, the particular design duties of each committee member. The explication of role responsibilities would not only expedite the completion of design tasks, but would also reveal the level of commitment of participants to the project. That is, participants would have had the opportunity to say whether or not they felt more was being demanded of them than they could accomplish. As the project progressed, it became apparent that some of the people involved were unable to participate in all tasks. This may have been due to a variety of reasons, but the primary problem appeared to be a lack of time. Their regular responsibilities had not been reduced, and they were not reimbursed for additional duties. Had this difficulty been exposed early in the project, discussion within each organization may have led to a better distribution of the work required.

Specific orientation and skills training would also have been helpful. Boundary personnel should possess or have access to certain kinds of information about their organizations. They should also possess skills in the areas of communication, problem solving, group management, and conflict

resolution. They need to be somewhat flexible concerning the work they are willing to do, insofar as they may have to carry out certain tasks not ordinarily their responsibility. Obviously, they must be strongly committed to the linkage project. Had there been an opportunity for the committee members to receive skills training, these kinds of problems might have been resolved and participant commitment might have been clarified.

3. Outline general task environment of each organization.

Although the specific focus of the Design Committee was the internship program between the MAP and Volunteer Services, it would also have been helpful for each member of the committee to have had a general understanding of the functioning of each organization involved. For example, it would have been important to point out the broad goals of the MAP, how it functioned within the context of the Community College Centers' programs, what resources were available to the MAP, etc.

It had been determined during pre-linkage activities that the internship experience between Volunteer Services and the MAP was conducive to linkage arrangements. Therefore, a ready-made focus for the Design Committee had been established. Thus, the Design Committee focused more on the program that would result from linkage than on linkage itself, and failed to consider thoroughly the general task environment of each of the organizations.

Had this sort of knowledge been stressed, it might have revealed some organizational difficulties that appeared later in the project. Also, organizational hierarchies were found to be less flexible than had been originally supposed. Had this been known earlier in the project, arrangements could possibly have been made to induce these hierarchies to allow for or tolerate more organizational flexibility.

4. Analyze specific task environment of each organization relative to linkage focus.

The analysis of the specific task environment should include an intensive review of each program's goals, resources, functions, activities, and structure. Examining each program in detail allowed the Design Committee to discuss program commonalities and obstacles from an informed perspective. They then could define realistic linkage program goals.

To facilitate this task, the Linkage Facilitator gathered and reviewed the available printed materials describing each of the programs. The Facilitator also spoke with program staff to obtain personal comments concerning each program's structure, functions, and activities, and the roles of its staff and participants/students. Also, students who had taken or were taking their internships through Volunteer Services were asked for their opinions concerning the effectiveness of and their satisfation with the experience. This information was coordinated with information gathered during pre-linkage activities.

It was the facilitator's intention to explicate, as comprehensively as possible, the nuances of each organization. It was also necessary to elaborate on the information the representatives already had about each other's programs, pointing out, particularly, the compatability of many of their goals. By presenting each program's goals and needs separately, their complementarity could be clarified. For example, Volunteer Services expressed a goal of providing service units with volunteers having a professional orientation. On the other hand, the MAP wanted to give students some "real world" experiences. Both programs also expressed the need for increased internal communication.

Volunteer Services staff also expressed the need to establish specific criteria for screening student applicants for admission to the hospital

training program. They also wanted students to participate in a hospital orientation before performing medical assistant tasks.

The Mecial Assistant Program staff wanted students to have information concerning the Volunteer Services Program, including the kinds of work available to them through Volunteer Services. They also strongly expressed the need for an evaluation of students' internship performances by the Volunteer Services staff, and they wanted this evaluation to be designed to reflect student attitudes more than the mastery of specific skills. (The students' actual skills training was obtained in the classroom. The purpose of the internship was to expose students to a clinical atmosphere, providing them with job experience). These needs and goals became the basis for the linkage program.

5. Specify constraints, limitations, or unique situations that may affect the linkage process.

Having determined fairly specific needs, the Design Committee had to carefully consider the constraints inherent in the program environement. For example, it had to specify during student orientation that certain hospital service units were off-limits areas for volunteers.

Some constraining issues were not discussed as thoroughly as they might have been, and this failing became evident during the program's implementation. The most noticeable problem was the scheduling of students for their Volunteer Services admission interviews, and subsequently the scheduling of their work time. Due to the conflicting schedules of the MAP staff and the Volunteer Services staff, even the arranging of appointments by phone was difficult, causing an initial delay in the implementation activities.

Additionally, students' on-campus classes were scheduled Monday through

Thursday, leaving only Fridays free for internship. There was little initial flexibility within the MAP concerning class attendance. This scheduling created the problem of having all the student volunteers available during only the same, limited time period, and Volunteer Services was therefore unable to place several students appropriately. After considerable negotiation, which further delayed implementation progress, scheduling conflicts were resolved.

6. Design linkage configuration.

In designing the linkage configuration, alternative arrangements should be considered. The design of several alternative configurations allows for greater flexibility and creativity in meeting the needs of all concerned. In the case of this project, however, only one arrangement was developed.

Having reviewed the needs and limitations of the programs, the staff designed a linkage configuration requiring the development of the following:

- Description of Volunteer Services (positions and responsibilities throughout the hospital open to students);
- Volunteer Services specifications for screening student applicants;
- Development of Student Profile Sheet for Volunteer Services staff use in screening students;
- Volunteer Services plans for orienting students accepted to work in their program;
- Evaluation forms to be used by Volunteer Services staff, providing relevant information to MAP staff about students' performance;
- Development of means of communication between MAP staff and Volunteer Services staff to discuss pertinent issues which would not be included in one of the above five categories.

With this information, the trial cycle of the coordinated program would proceed in the following manner:

a. Students would receive information about Volunteer Services.

b. The student profile sheet would be completed and delivered to Volunteer Services.

c. Students would arrange interviews with Volunteer Services staff.

d. Volunteer Services staff would accept students for internship on the basis of their profiles and interviews.

e. Volunteer Services, with the students, would ararange an appropriate placement and work schedule.

f. Students would receive a comprehensive orientation to the Volunteer Services Division and the units within the hospital where the division could place interns.

g. Students would perform 140 hours of work, receiving regular evaluation from their placement supervisors.

h. Internship evaluations would be incorporated into each student's total MAP evaluation.

i. Only a limited number of students (five or fewer) would participate in a trial implementation cycle.

To complete the tasks necessary for implementation, work was distributed among the boundary personnel. The MAP representative was responsible for instructing students on the completion of their student profiles, scheduling student interviews with the Volunteer Services staff, and orienting students to the hospital. The Volunteer Services Director was responsible for interviewing and placing students appropriately in various hospital units, monitoring student performance, and obtaining completed student evaluations from the unit supervisors.

Far West Laboratory assumed responsibility for designing the forms necessary to complete the tasks.

7. Select one or more linkage configurations for implementation.

In the case of this project, only one configuration had been designed. Thus, no selection process occurred. If such a process had occurred, the selection should have been made on the basis of:

- the goals and objectives of each participating organization;
- the standards of quality desired;
- the structures, roles, responsibilities, and resources required for implementation.

A restatement of these criteria is useful whether or not there are alternative configurations from which to choose. The restatement process ensures that everyone understands more precisely what is going to be done, why it is being done, and what resources and activities are necessary.

In the case of this linkage project, in order to make sure that everyone understood clearly what was to be done, the Linkage Facilitator conducted a review and orientation session for the other members of the Design Committee prior to the try-out implementation of the linkage arrangement.

8. Set up communication/feedback channels needed to implement the linkage arrangement and to monitor progress.

In spite of the fact that the linkage arrangement consists primarily of communication activities, additional communication channels are often needed to verify the occurrence of specified activities. These channels should be created in advance.

In the case of this linkage project, it was agreed that boundary personnel would exchange periodic reports concerning the progress of their tasks. The MAP staff would also receive information about students' internships. In addition, the Linkage Coordinator would keep the administration of the Community College Centers informed of the progress of the linkage activity.

In retrospect, it would perhaps have been better for the MAP staff and Volunteer Services staff to have been in more direct contact with each other. Careful outlining of communication roles and responsibilities might have prevented the Linkage Facilitator from assuming the primary communication role, a situation which caused some problems in this project.

9. Set up evaluation parameters and procedures.

Informal (as well as formal) evaluation activities should be carried on throughout the linkage design and implementation process. Before linkage arrangemnts are implemented, however, evaluation procedures should be developed, so that participants will be able to obtain information about the effectiveness of the linkage arrangements.

In this project, each aspect within each phase of the linkage process was subject to evaluation. This comprehensive evaluation plan was designed by Far West Laboratory and submitted to the Design Committee during linkage design activities. The participants agreed that the evaluation plan appeared useful, but would be regularly reviewed to verify its ability to provide pertinent and helpful data. For example, questionnaire responses would be processed immediately upon their receipt, and if a response created new questions concerning the functioning of the project, the respondent would be contacted concerning the matter.

Questionnaires were also distributed to members of the Advisory Committee, following their initial meeting. The questions were designed to elicit their comments on the effectiveness of the explanations they were given concerning linkage.

Evalution of the design process was conducted throughout, but particularly at the culmination of the project. A questionnaire was distributed to all those participating in the design of the linkage program, in order to obtain their reactions to the process and their opinions on the success of the design. Following the pilot try-out, all participants were additionally asked to respond to questionnaires specially designed for the program's various participant roles. The following steps explicate linkage try-out and evaluation:

10. Implement linkage try-out.

After designing the activities which were to take place between the MAP and Volunteer Services, the next step was to implement the activities on a trial or pilot-test basis.

Prior to pilot testing the Far West Laboratory conducted a general orientation for all staff participating in the program. In this meeting all activities were reviewed, and final instructions given for the completion of implementation tasks. Lists of activities were distributed to remind participants that the tasks were intertwined, and that therefore, the success of the work of each participant was dependent on that of the other participants. Communication and monitoring procedures were also reviewed, including the kinds of information to be recorded in the weekly log reports.

At the beginning of the pilot implementation, the MAP staff presented the

students with internship information, including a description of the opportunity to participate in the linkage arrangement with Volunteer Services at Presbyterian Hospital. It was explained that several hospital units had space for volunteer workers and, in conjunction with Volunteer Services, each student would be appropriately placed. The MAP staff then arranged interviews for interested students with the Volunteer Services Director. In preparation for their interviews students completed student profile forms. These forms were mailed to the director for his review prior to the interviews.

At the beginning of internship activities, students participated in a hospital orientation, during which they were advised of their responsibilities. Students then began a pilot implementation period, during which student activities were monitored by the Director of Volunteer Services. The Linkage Facilitator and the MAP Linkage Coordinator also monitored the more general characteristics of the pilot program, including communication patterns, resources required to implement activities, etc.

Approximately three months were scheduled for the pilot cycle of the coordinated program. Although students were to continue their internship beyond the three-month period, at the end of the three months, specific actitivies were comprehensively reviewed and evaluated. All participants (students, MAP staff, and Volunteer Services staff) were asked to complete questionnaaires concerning their particular roles, the effectiveness of the internship arrangements, and their suggestions and recommendations for improvement.

11. Provide evaluation feedback.

Following the completion of the pilot cycle and the evaluation activities, another meeting of the Design Committee was held to obtain feedback regarding the monitoring and the evaluation of the internship arrangements. At this meeting, the Linkage Facilitator presented the findings of the evaluation questionaires. The MAP and Volunteer Services staff provided reports on their perceptions of the internship arrangements.

The general consensus of all involved was that the linkage arrangement was a great improvement over the previous relationship between the two organizations. Volunteer Services felt that the student volunteers had done an excellent job. The MAP indicated that the students' reports about their experiences had been positive and that the arrangements seemed to be working well. The students themselves indicated that their internship experience had been valuable.

It was pointed out that there were some aspects of the linkage arrangement which needed attention, for instance the problem mentioned before created by the students' class schedules. The schedules restricted their volunteer availability to Fridays and therefore limited their flexibility for placement on various service units. As it would have taken a major revision of class scheduling, there was little that could be done about this limitation.

Ongoing communication procedures were another area of concern. Because of MAP staff work schedules, the MAP coordinator was sometimes unavailable when needed to make arrangements for students. This was less of a problem once students were actually in the hospital. It did, however, result in some confusion initially arranging appointments for student interviews. As a result, the MAP suggested that the MAP Linkage Coordinator, a member of the Centers' Student Services staff, be appointed as a contact person for the MAP.

12. Decide whether to continue linkage and whether adjustments are required.

Based on the results of the pilot try-out, the MAP and Volunteer Services decided to continue the linkage arrangement for the student internship program. The major adjustment needed was clarification and intensification of communication channels.

Phase III: Formalized Cooperative Arrangements

After the pilot try-out of the linkage arrangement and the decision to continue the arrangement, the next step is to formalize the linkage activities. Activities in this linkage project included the following:

1. Negotiate and formalize the agreement.

With the decision to have a member of the Center's staff act as a contact point between the MAP and Volunteer Services, the two groups arrived at a cooperative agreement. However, a formal written agreement, specifying activities, roles, and responsibilities, was not developed. Such an agreement would be desirable.

2. Plan a long-range coordinated program.

Based on the success of the experience working with Volunteer Services of Presbyterian Hospital, the MAP staff expressed interest in expanding the program to other hospitals as well. During this phase, with Far West Laboratory withdrawing from activity, the MAP and the Center's Linkage Coordinator assumed responsibility for planning, initiating, and developing these linkage arrangements. As the linkage project reported in this case

study drew to its close, discussions were already underway with one additional hospital.

3. Implement and monitor the program.

Because Far West Laboratory's project with the two agencies reported in this case study ended at the end of the pilot test, it is not possible to report any activities between the MAP and the hospital. Presumably based on the modifications suggested, the linkage program will continue. It will be important to monitor regularly the functioning of this joint linkage program.

Additional Findings and Implications.

During the linkage activity reported in this case study, Far West Laboratory staff served in a dual capacity. On the one hand, as Linkage Facilitator, project staff took a leadership role in developing the linkage arrangements. It seems fairly clear that the activity reported would not have occurred without the resources provided by Far West.

On the other hand, FWL project staff served as observers of the activity between the two groups, recording the activity and developing a model for linkage. Following are some of the implications drawn from these observations.

1. Need for orientation concerning the concepts involved in the design of linkage arrangements may be necessary.

Individuals representing organizations do not always understand how to design (and implement) a linkage arrangement that will truly meet the needs of each organization represented. Thus, there is clear indication that instruction concerning linkage concepts is necessary prior to the initiation of the linkage process.

2. Resources are needed to design and to implement linkage.

The most important resource is staff time. If participants have to fit linkage activities into their routine responsibilities, they may have difficulty designing and carrying out a successful program. Thus, if an organization or program is experiencing internal problem, it may not have sufficient resources for linkage. But as has been pointed out, organizations may acquire more resources through linkage than would be available to an organization operating alone. The fact that linkage activity also requires certain resources for implementation can in some cases result in the paradox that an organization which might benefit greatly from linkage may not have sufficient resources to design and to implement such a program.

3. Participants must receive reinforcement and recognition within their own organization for engaging in linkage.

If it is unclear whether or not an organization values the linkage efforts of individuals, these individuals may be unable to sustain a high level of commitment. Under the pressure of routine tasks and responsibilities, individuals may tend to engage in those tasks for which they receive reinforcement, giving low priority to linkage tasks. This will be particularly true if the Linkage Facilitator has access to resources unavailable to the other participants.

4. Participating organizations should have a clear understanding of each other's goals, structure and resources, and limitations.

The probability of successful design and implementation of linkage is increased when this kind of understanding is reached. Moreover, the problem or focal area which is being addressed must be clearly understood by all.

SECTION III

A LINKAGE GUIDE

Introduction

Our experience in implementing linkage demonstrates that the process is effective and rewarding, albeit difficult. To help you minimize the difficulties as much as possible, we have prepared this implementation guide. This is not a step-by-step "how-to" manual,* however, but rather a compilation of findings and perceptions reported here to orient you toward linkage and make you aware of, and prepared for, some of the difficulties which might present themselves as you engage in the linkage process. We are presenting this guide primarily on the basis of our experiences. However, you may discover, as we have, that certain situations can arise which will cause you to consider a wide range of individual and organizational reactions. We have, therefore, incorporated speculations with actual experiences in order to provide you with an array of possibilities. It is well to keep in mind that a sizable number of people will be involved either totally or peripherally throughout the linkage process, and that the coordination of their activities is complex.

We begin the guide on the assumption that you, the reader, are interested in the expansion or development of a program area which can be enhanced by a mutual coordination and/or exchange of resources or activities among organizations. Interorganizational coordination can be brought about through linkage. This guide may help you develop such linkage. In reading the guide, keep in mind the linkage model presented in Section I.

*Procedural steps of linkage were described in the model section of this monograph.

The guide follows the three linkage phases explicated in the model. These three phases generally correspond to increasingly binding levels of organizational commitment. That is, the degree of commitment required to engage in and accomplish the pre-linkage activities is that which allows the organizational representatives to explore the desirability of linkage. During the pre-linkage stages you will want to regularly assess your situation with the knowledge that the completion of this stage requires a decision concerning the continued pursuit of linkage. If there is a decision to continue into linkage activity, a deeper commitment is required, both organizationally and personally, from participants. In commiting themselves to linkage activities, organizations are supporting the design and testing of a coordinated interorganizational program. Following the testing of a coordinated program, participants and their organizations will be faced with deciding whether or not the commitment should be made to establish a more permanent formalized coordinated arrangement.

Throughout the Implementation Guide, we refer to the responsibilities of the linkage participants according to their roles in the process. The following descriptions characterize the participants involved:

(a) Boundary Personnel: These individuals represent the participating organizations and as such have the authority to go beyond each organization's limits or boundaries to perform communication and negotiation roles involving the linkage process. A number of individuals from each organization may be included in the boundary personnel.

(b) Linkage Coordinator: One of the boundary personnel should be appointed to this position. It will be the responsibility of

this individual to coordinate the linkage process within the participating organzation.

(c) Linkage Facilitator: The linkage facilitator has a helping role. The facilitator represents a third party who may initiate and coordinate the linkage arrangement or the facilitator may be an individual in an institution willing to initiate and coordinate a linkage arrangement with other organizations. Thus the facilitator must possess the skills to analyze organizations, design linkage arrangement, and provide the framework for implementation of these arrangements. The linkage facilitator may also provide training for boundary personnel, particularly the linkage coordinators, so that planned activities can be carried out effectively.*

This guide has been written from the perspective of the Linkage Facilitator and explicates the kinds of tasks that need to be accomplished and a discussion of these tasks in the general order of the three phases of the linkage model. We say "general order" because the process must be appropriate to the people and organizations involved. Though the process cannot be firmly nor rigidly set, it is important to cover tasks within the phases as they are outlined here, in order to provide organizations with the kinds of information they will need when deciding whether or not to make a deeper commitment, engage in linkage design, and make binding commitments.

Some situations that we describe may not arise in your circumstances. On the other hand, you may find yourself confronted with situations about

*Note: the question of support and source of authority for linkage facilitators in the educational setting is an important issue that has not yet been fully explored.

which we have not provided specific information. However, in the latter case, you will be able to manage if you are accurately and well informed about the participating organizations.

The Implementation Guide

I. Pre-Linkage Activity

The potential for successful linkage is enhanced when the linkage is based on a strong foundation of knowledge and understanding about your institution, its structure and administration, the particular area of the institution and the people in it that would be most heavily involved, and the specific activities within that area that might benefit from a linkage effort. That is, before proposing linkage as possibly beneficial to a program, be prepared to answer a lot of questions from people who may be skeptical of the process and protective of the organization and their spot in it. Understand your institution well enough to know if its members will be responsive to linkage, if its structure can and will tolerate the expansion of its boundaries to the degree that it can enter into collaborative activities with other organizations within a specific area(s).

Administrative support from your institution is essential. The more specific and focused your proposed linkage arrangements, the easier it will be to gain that support and confidence. For example, the focus of the proposed activity may be a specific problem that you feel your program has (e.g., students don't have opportunities for "hands on" experiences in real life settings) or a more generalized need of your program (e.g., need to make curriculum more relevant to work). Once you have been able to specify the area and to show that this is a concern of others in your program, such as staff and students, then it is easier to obtain the support of your administration. In pinpointing a focal area, make sure you understand your program well in terms of its goals, the curriculum content, the administrative structure, the line of authority in your program, some of the typical problems

your administration and staff are facing, and the type of students you have enrolled in the program. All of these are areas that you should take into consideration well before planning to enter into the linkage negotiations.

In seeking administrative support, there are two specific aspects that should be covered. The first concerns designating the appropriate person(s) to enter into linkage design, and the second concerns the resources that will be available to these persons. Both are crucial.

The person or persons selected to engage in linkage should have the authority to represent the program and the institution in interacting with other organizations. They should be able to negotiate arrangements for program coordination, resource sharing, the expansion of boundaries, etc.

Linkage participants must be prepared to consider the costs and benefits of a variety of possible changes to determine their impact on the program. They must be able to analyze and determine which of the possible changes will ultimately provide highly desirable benefits in spite of, perhaps, apparent immediate sacrifice. We discussed "costs" and "benefits" in the first section of this document.

Thus, if you are to represent your institution and act as boundary person, you must make sure that you have credibility with and support from the staff. If you don't then you may wish to involve someone else who does. Note that obtaining this support is not a commitment from your institution to do whatever you want them to do. To be effective it will be necessary, as linkage activities evolve, to check back with your organization frequently in order to keep them informed and to ensure that you do have their continued support.

The second issue is also important. That is, along with support from

your organization, you will need resources. In the beginning particularly, you will need time. It will be difficult for you to enter into linkage discussions if you are required to do so in addition to all of your other duties. If your institution is not, at the minimum, prepared to free someone to do groundwork, then linkage has a weak chance of improving present conditions and achieving the maximum benefits available through linkage arrangements.

When administrative commitment is secure, you can begin determining who should be involved in the linkage. A problem to consider here is the attitude of institutional personnel in general toward linkage itself. A special effort might be required to encourage individuals to accept the notion of linkage in their basic attitudes toward their own and other organizations.

Once you have decided that your institution has the potential, need, and motivation for establishing a linkage arrangement with another agency, it is time to start thinking about the potential set of organizations with which to link. Undoubtedly, you thought about this at the time you were considering the focal point for your program.

Consider what might be the motivation for another organization to collaborate with your program. What would they get out of it? Until you have a general program area in mind, you can't speculate about benefits to all concerned. But you can think of some general areas. For instance, if you were to develop a specific program with a set of industries, you might ask: What needs of these industries would be satisfied by the program? Would they be getting more competent employees whose preparation is more relevant to their jobs? Would their current employees have better opportunities for continuing education and training? Would they get services from your

organization that they now need but do not have or which are less than adequate? Or, would it satisfy a public service need on their part? While you are trying to speculate about these questions, you will need to develop a list of potential organizations that would gain benefits from linkage and with whom to explore linkage.

To sum it up, at this initial stage you will need to determine which organizations have related programs or have initiated programs with your institution and have potential services or components which could profit by linking with your institution to solve mutually identified problems.

This information may be obtained by consulting with administration and staff in your institution so that a preliminary list of recommended organizations may be prepared. At this point you will need to approach selected organizations to obtain information about previous experience they may have had with your institution and to determine current interest in working with your organization to design a program.

Because the issue of motivation is crucial, each organization's motivation for participation in the linkage arrangements is important. Linkage efforts seem to work best when the organizations are highly motivated to participate, and when the motivation level of each organization is about equal. You can help move organizations toward this balance, and approach organizations with this idea of balance in mind.

It is also important to remember not to oversell what your institution has to offer. Expectations, promises, and commitments should be as clear as possible to all the participants in advance. In an attempt to interest an organization in becoming involved in a new program, it is easy to paint an overly bright picture of what they can gain from it. It would be better to

err on the negative side so that unexpected gains are bonuses. A related problem is that, at the beginning of the linkage negotiation, everything about the linkage effort cannot be known, and some people may be uncomfortable with that uncertainty. In any case, an attempt should be made throughout the linkage arrangement to be realistic about the possible outcomes, and periodic checks should be made to see that expectations continue to be realistic.

Keeping these things in mind, the initial contacts may be carried out by telephone, while a description of what you are proposing will require a personal visit to describe your ideas about proposed linkages. The question of who to contact at a given organization will vary. It undoubtedly helps to know someone in a position of authority. You can contact this person to determine the key person responsible for a specific program. In other cases you may know no one. If this is the case, you would do well to have the head of your institution contact the head of the other organization and thus identify the program and person who would be appropriate to contact for further discussions.

Our experience leads us to believe that contacts with other organizations are most effective when they are made between people of similar levels within the structures of the organizations' hierarchies.

After you are satisfied that you are talking with an appropriate person within that organization, explain to them what you are seeking. At this point, remember, that you don't have a specific program in mind. You may have ideas of linkage areas and programs from your standpoint. You haven't heard directly what the other organization's needs and desires are, but you have done substantial exploration allowing you to speculate intelligently from a well-informed perspective. You ought not to assume too much about another organiza-

tion. Through preliminary study you can, however, gain sufficient knowledge to help you determine the likelihood of that organization's receptivity to your proposed linkage arrangements. Initially, it is important to be as flexible as possible concerning linkage activities--within, of course, the boundaries of what is essential to you and your organization. To develop a mutually supportive and beneficial program requires that you enter into a negotiation and design process, and to do so with fixed notions may inhibit progress. What comes out of this process may not be the same idea or program that you entered with, but, by definition of the process, will necessarily be just as beneficial.

II. Linkage for the Design of Coordinated Arrangements

A. Design

When interest has been established from one or more organizations, it will be important to emphasize that linkage requires joint designing of and decision making for the coordinated program. To achieve this, representatives from all involved organizations must form a boundary personnel design committee and regular planning meetings should be arranged.

Boundary personnel should be chosen on the basis of their familiarity with their own organizations, their ability to represent that organization accurately, and their power to carry out decisions made by participating organizations. Therefore, the selection of the people is very important. It is also important, even in light of careful selection, to understand the decision-making limitations of any one person within an organization, in spite of what may appear to be a position of unlimited power.

Also, members will need skills to explore linkage alternatives and to choose and implement programs. Participants are most effective when they have the following abilities and knowedge:

- The ability to work together in a team effort.
- A knowledge of smaller divisions in their own organizations (e.g., knowledge about how the classroom operates).
- A knowledge of general operations (i.e., how the organization operates to maintain itself).
- A knowledge of legal and other technical areas that might need to be explored.
- An ability to analyze existing programs, and to plan carefully and creatively.
- Skill in group management and conflict resolution.
- An ability to open doors to decision-makers.
- Credibility with those individuals the member is representing.
- An ability to communicate well with others.
- A knowledge of organizational procedure to obtain approval of and support for the goals and concepts of linkage.

The group,* as a whole, should:

- Maintain accurate records of the meetings.
- Represent all levels and groups that will be affected by the program.
- Represent the most successful relevant programs.

Boundary personnel can include representatives from all levels of the participating organizations. Regardless of level, those people who are going to be actively involved should be present in the most preliminary

*Our experience indicates that the most successful committees are comprised of people not only interested in the particular program of linkage, but in linkage itself. Their enthusiasm for the concept helps maintain a cooperative spirit throughout the arduous linkage tasks.

of meetings, if possible. Also, those people whose organizational domains will be affected by the linkage process. You may want to include these people in early meetings in order to give them a working perspective of your activities, as well as reporting meeting events to them. Establishing an efficient flow of information to the people who are peripheral to the actual work, but affected by it, and therefore concerned about it, can help you avoid unnecessary difficulties or hurdles, and can help assure you their continued support.

The arrangement of boundary personnel meetings presupposes an organizational review of the information gathered and exchanged during the pre-linkage activities. The plans for these meetings indicate a willingness on the part of the organization and their representatives to make further commitment to the linkage process. That is, the organizations endorse the process to the extent that they will participate in the Design and Implementation Phases which include the design, trial, and testing of linkage and interorganizational coordination.

The linkage activity includes designing and implementing a coordinated program that provides mutually beneficial organizational enhancement and outcomes for all participating organizations and programs. The activities involved in achieving the benefits of this phase require a deeper level of commitment to linkage from the organization than was necessary to accomplish the pre-linkage activities. This commitment is most effectively demonstrated by the organizations' willingness to grant adequate time to selected staff (boundary personnel) to engage in this second phase of the linkage process and to provide needed support services.

If at all possible, boundary personnel should be freed from some of their regular job duties, so that they can devote the amount of time required to design and implement linkage arrangements. If time is allotted for meeting and planning together, participants may avoid feeling overwhelmed by the demands of

the linkage effort and can thus manage to sustain the necessary motivation.

Regardless, people will have time limitations, therefore, boundary personnel meetings should be well planned. Waste and delay can be kept to a minimum by polling members before each meeting to determine their agenda priorities. Written agendas can then be prepared to guide meetings in a general way and briefing or information papers can be distributed before the meetings.

Participating agencies should also identify a goup of support people who will organize meetings, take notes, report on meetings, handle clerical tasks, gather and analyze data, communicate among the various representatives of the organization(s), and in general, provide the services that are necessary to effectively complete the tasks of the linkage design process. The need for efficient, accurate communication cannot be overstated.

By the time boundary personnel meetings begin, you have presented considerable information concerning linkage. Also, boundary personnel have been selected on the basis of their possession of the abilities listed previously. However, they will need considerably more briefing on their specific tasks. The development of written guidelines might give you an opportunity to present substantial information while at the same time easing committee members' anxieties simply by having something in writing that sets forth tasks and methods to carry out tasks. Further, the written guidelines would clarify the kinds of skills needed throughout the linkage process, thus helping to pinpoint areas where committee members might feel the need for orientation or training. You will want to satisfy training needs as quickly as possible, using the situation at hand more than theoretical concepts.

As part of, or at least simultaneous to, orientation and training, boundary personnel ought to be gathering information and documents that are needed to scrutinize the general task environments of their organizations.

This might include:

- an organizational profile (including various levels within the organization, organizational policies and procedures;
- a description of both the overall goals and programs of the organization and the linkage-relevant goals and programs;
- a description of anticipated benefits from linkage;
- specifications of potential organizational resources that might be available;
- organizing perspectives for linkage and coordinated arrangements;
- ideas about specific guidelines for design and the testing or assessment of coordinated arrangements.

When these documents have been developed they should be shared among boundary personnel so that they can study them and possibly refine (revise) the representation of their own organization and discuss these documents at joint meetings.

There are several difficulties in representing the organization. Boundary personnel may be so close to their own organization that they overlook certain functions, goals, or resources that need to be explained to other boundary personnel. They may be aware of (other) functions or goals, but not perceive their relevance to linkage.

You will want to be prepared to help sort this "representation" information objectively. You will also want to be prepared to tactfully convey organizational weaknesses that may impose upon and affect the linkage, but that boundary personnel do not perceive or do not wish to convey. You will have to determine the most suitable way of handling sensitive situations of this sort. Obviously,

techniques for dealing with these kinds of situations vary tremendously depending on people and their organizations. You will have to be insightful and sensitive toward others' perceptions and anxieties.

Concomitant with studying and characterizing their organizations, boundary personnel will be analyzing potential linkage configurations, determining their goals and functions within the larger framework of each organization. Linkage program goals and objectives should be specified distinctly relevant to overlapping and complementary areas of participating organizations. The listing of goals and objectives easily leads to an identification of functions and activities, program components and their structure, and resources needed. All of these aspects of the linkage program design need to be carefully and comprehensively discussed. Group discussion about these topics is helpful in that it allows the participants to raise issues and questions about each other's organization's participation. Discussion can, however, continue beyond the point of being fruitful. You must be able to determine when the conversation loses its productivity in order to avoid wasting time. However, you must be cautious not to eclipse items that are clearly important to at least some, if not all, participants. You are not likely to complete any one topic in one discussion of it, so do not be disturbed by lack of closure. And do what you can to encourage the committee members should they become frustrated by incomplete discussion. In fact, you often may find it more efficient to leave questions unresolved until another meeting when the participants have had a chance to give them further thought.

During this stage, there are a variety of topics which can be discussed simultaneously and which naturally lead one into another, allowing you to

lead the discussion away from areas that obviously need additional investigation or thought. For example, should the group reach an impasse during the discussion of organizational or program structure, it may be that you are facing an organizational or personal limitation. Rather than dwell on an immediately unresolvable issue concerning structure, take the opportunity to begin to review related topics, like constraints. The more difficulties you can identify in advance, the greater likelihood of avoiding crisis situations later. In this discussion of constraints, limitations, or unique situations you will want to consider legal and financial constraints, activity accountability, administrative problems like budgets and organizational calendars among the possible circumstances that may impose on the program.

Problems may also arise within the boundary personnel group itself, members of the group who fail to show up, come late, leave early, or do little work, may annoy others. By discussing this kind of behavior early, and in conjunction with desirable levels of commitment from participants, you may be able to avoid not only unpleasant situations, but also incompletion of tasks. And, clearly, to avoid unnecessary pressure and anxiety, tasks should be assigned well enough in advance to allow participants to meet deadlines.

Scheduling meetings, in itself, may create problems. This too may be related to the issue of organizational commitment, in that participation in linkage may be organizationally approved but without appropriate time allowances. This may put you in the position of occasionally having to meet separately with members of the boundary personnel committee. This situation is, of course, less than ideal, but it is better than leaving participants totally on their own to complete their tasks. It will at least help to prevent feelings of isolation and will expedite communication concerning the progress of activities.

In designing linkage configurations, the whole group might work together on several possible configurations. Or you may ask that each participant on his or her own design a configuration. Then as a group you can discuss benefits and shortcomings of individually developed configurations, select one from among them, or design a new one drawing from the various contributions. If the group does have time and is agreeable to the idea, working together may offer the greatest advantage.

Designing alternative linkage configurations can provide a range of levels of interaction, commitment, and time required to complete the program tasks. A determining factor, then, in making a selection might be evidence of commitment from the organization and the boundary personnel. If you have found that ideas have been ambitious, but the accomplishment of tasks has not matched that ambition, it would be wise to encourage the implementation of a less demanding configuration.

On the other hand, the purpose of the design activity is to provide enough information to the organization to help the members foresee the long-range benefits of formalized cooperative arrangements. The linkage configuration, or program selected for pilot implementation, then, must be substantial enough to demonstrate whatever is needed for the organizations to see the benefits of the cooperative effort and to make decisions concerning their commitment. But it ought not be so demanding that it cannot be accomplished.

As soon as a particular linkage configuration, or program has been selected, specific tasks can be delineated. If the tasks are specified in writing and individuals are asked to respond to them in writing, clarity and commitment can be enhanced. You must regularly assess the degree of

responsibility each organization and each individual is willing to assume. This can become quite demanding depending on the complexity of the linkage arrangement, the length of time of the program, and the number of people involved.

You can now begin to delineate specific tasks. If the tasks are specified in writing and individuals are asked to respond to them in writing, clarity and commitment can be enhanced. You must regularly assess the degree of responsibility each organization and each individual is willing to assume. This can become quite demanding depending on the complexity of the linkage arrangement, the length of time of the program, and the number of people involved.

You can monitor overall progress, keeping in touch with each organization's needs and responsibilities, while the linkage coordinators can work directly with their own representatives to assist them in the completion of their tasks. Frequent contact is important in maintaining linkage activities as a priority among the daily job demands of the participants, as well as in establishing greater efficiency through direct communication. You should not expect that communication will take place automatically, but must regularly check with those involved concerning their progress, questions, and burdens related to the effort. You may want to establish specific means for reporting the completion of tasks, particularly as the completion of one person's task may affect the progress of or completion of another's.

Along with communication, regular evaluation is important to the progress of the project. In order to get maximum value from the evaluation, begin the evaluation process as early in the project as possible. Evaluation of the overall effort and end results may aid future linkage attempts, but ongoing evaluation can aid the linkage design effort along the way. In the last section of this

guide we introduce guidelines for evaluation.

Deciding early what information is needed, and the means for gathering it, may keep the group from letting some event or project phase slip by undocumented. Necessary tests, questionnaries, etc. for validating the linkage effort may need advance preparation. For example, pre- and post-testing may be desired to determine changes which occur in certain areas relevant to the linkage effort. Such tests are not easily developed and may require the assistance of evaluation specialists.

B. Pilot Implementation

Pilot implementation of the coordinated program gives you the opportunity to test your design. The pilot program is tested under time pressure. Many adjustments may be required to handle unanticipated problems. Forming a trouble-shooting team including yourself, the coordinators and representative boundary personnel may help alleviate problems and reduce anxiety among project participants just in knowing there is back-up assistance. Participants, because of specific tasks, may be working more on their own now than they have been since the project began. You and the coordinators may be the only people with a comprehensive view, making it, then, your responsibility to help the others avoid a sense of isolation and fragmentation of the project. In spite of heavy schedules at this point, you ought to arrange short "mini-forming" sessions, in which everyone can share their concerns, problems, and successes, and can realize that a number of linked activities are occurring simulataneously.

Also at this point, your evaluation channels will produce substantial information. The evaluation will be basically formative. Evidence may show intra- as well as inter-organizational linkage activity, or may suggest that some aspects of the linkage effort were more successful than others. Whatever

the information you received through evaluation channels, feedback must be provided to participants immediately.

Evaluation can provide validation and a basis for adjustment, as well as indicating the possible future directions a program may take. Results communicated to participants will allow them to design future coordinated arrangements more effectively. Without such communications, they may simply repeat mistakes. If feedback instruments--questionnaires, test, etc.--are quickly tallied, analyzed, and reported to participants, adjustments can be made in time to affect the ongoing linkage efforts.

Evaluation might also indicate programs, activities, or events that have grown out of the pilot implementation, even though they were not originally specified. Existing programs and events were recognized as relevant and facilitative of the linkage problem.

Throughout the pilot testing of your program, the organizations involved will be watching closely to determine the benefits of the program. The results of completion of this phase of the activities will contribute to decisions concerning continued organizational involvement in linkage. The participants, with your help, will want to be prepared to account for the events taking place, demonstrating what represents an improvement over previous conditions and what additional improvements might be made in the coordinated program. The organizations must perceive benefits in order to commit themselves to formalized cooperative arrangements.

III. Formalized Coordinated Arrangements

While institutional-level agreements in various forms may have been made throughout the linkage process on a short-term, limited, or informal basis, one or both organizations may ultimately recognize the value of this more

formalized arrangement. If the pilot implementation was judged to be mutually beneficial, the organizations might move toward formalized arrangements.

Since interorganizational arrangements resulting from the linkage process imply a set(s) of ongoing activities and require organizational changes, coordinated agreements, and sharing of resources, it is imperative that institutional decisions and provisions be made to ensure the successful continuation of the linkage effort.

Formalized cooperative arrangments should be flexible enough to accommodate change. At any time the organizations may decide that it is appropriate to alter the arrangement(s) so comprehensively that it becomes necessary to redesign the arrangement.

Essentially, then, there are three steps required in establishing formalized cooperative arrangements.

- Commitment

  It is no longer appropriate for organizations to view their commitment to the coordinated program on a short-term basis good for only a phase of activities. Commitment to formalized cooperative arrangements implies that the activities of the coordination are as important to the organizations as any of their other activities. That is, the coordination is integrated as a normal function of the organization. The organizations will want to make specific and negotiated formalized arrangements, or even legal contracts, with each other that represent their intention of continued (mutual) participation.

- Planning Implementation

  If the implementation aspect of the linkage process went smoothly, it is possible that the organizations can simply continue with it, making

only minor changes. It is also possible that evaluation of the pilot implementation demonstrated the need for adjustments and additional planning. If the situation is the latter, the organizations must designate the staff and resources necessary for making the appropriate alterations.

- Implementation and Monitoring

  Implementation of the formalized cooperative arrangements imples that the arrangement is no longer dependent on an individual or small group. It achieves its own coherence with the organizations. As a result, it may lose some adaptability. Monitoring will appraise if an appropriate (degree of) tension is no longer keeping these two dimensions balanced. The balance will allow the maintenance of benefits to the organizations involved.

GUIDE TO EVALUATION

Introduction

This companion to the Implementation Guide contains a general overview of evaluation as it applies to the linkage process. As indicated in the implementation guide, evaluation activities must occur throughout linkage. This guide provides a broader perspective for the evaluation process than that contained in the single step contained in the linkage model. .

A View of Evaluation

In the past, educational programs and products have often been developed and disseminated without systematic, objective evaluation. As a technology of education has emerged, however--especially since World War II--the need for relatiable and accurate information about programs and products has become increasingly apparent. Evaluation is a process that can provide such information.

Unlike basic or pure research, evaluation is not done for its own sake. It must be useful. And if it is to be useful, evaluation cannot stop with the rational collection and analysis of data. Value judgments must be made. These judgments then become the basis for later decision-making.

The Process of Evaluation. A general model of the evaluation process might consist of six interrelated steps:

- define the purpose of the evaluation;
- determine what kinds of information should be collected;
- define ways and means by which to collect the information;
- collect and analyze the information;
- draw conclusions from the information; and
- make decisions.

Each step is explained in more detail below.

Define the purpose of the evaluation. The evaluation plan will be guided by the purpose or purposes of the evaluation. If the specific purposes of evaluation are not clear, the participants may work at contradictory tasks. resulting in an inadequate evaluation.

Determine what kinds of information should be gathered. This is a crucial aspect of planning. The questions raised here should relate to the particular decisions for which the evaluation is intended to provide useful information.

Define ways and means. Not only must we determine the nature of the information to be collected, we must also select or create the means and define the methods for doing such collecting.

Draw conclusions from the information. After information is collected and analyzed, we must answer the questions posed at the beginning of the process (i.e., what happened; who did what, when, and why; of what value was the product or program). Conclusions are reasoned arguments. Sometimes strong evidence will exist on which conclusions can be based; at other times, the data may be mixed and the conclusions may be less clear. No foolproof procedure for drawing conclusions exists.

Make a decision. The evaluation data gathered and analyzed and the conclusions drawn will provide the information base upon which a decision can be made.

Purpose of Evaluation in Linkage

As the Implementation Guide indicates, decisions must be made throughout the linkage process. Because evaluation aids the decision-making process,

evaluation information must be collected during all phases: pre-linkage (planning), design, and implementation. The evaluation information collected at these times can serve different purposes, as outlined below.

Preliminary or Context Information. Prior to the development of a solution to any problem, a systematic analysis of the need and its context is essential. Diagnosis of specific deficiencies is frequently needed as well. In many cases, too, development begins with a statement of goals that is too vague to use as a base for operational plans. In such instances, information which can clarify and focus those goals must be collected. For example, in pre-planning for linkage, quantifiable and qualifiable information is useful for focusing linkage activity. Questions of possible interest include:

- What information is available concerning the strengths (and weaknesses) of a particular vocational program?
- In what areas are student skills lacking?
- What resources are available for linkage?
- What are projections for future needs of the program?

Progress Information. Another essential element of every evaluation is data about the nature of the components or parts of the product or program. The collection and analysis of this data is also known as formative evaluation.

Progress information is important during both the design and implementation stages of linkage. During linkage design, information will be needed that will help guide the development of an effective linkage arrangement. Questions of possible interest include:

- Do participants understand linkage concepts?
- Is sufficient (or too much) time being spent on certain activities?
- What resources are being utilized to design the linkage arrangements?

During the trial implementation of the linkage arrangements, progress information is also essential. It is necessary to monitor the trial implementation closely so that possible minor problems can be detected before they become major concerns. Possible questions include:

- Who is doing what?
- What resources are being used?
- Are certain problem areas emerging?
- Are any unanticipated events happening?

Summary Information. Summative evaluation is the collection and analysis of data for the overall assessment of the linkage arrangement and/or its effects. Questions of interest include:

- What impact did the linkage have on the participating organizations or programs?
- What were the benefits relative to costs?
- What improvements should be made?

Means and Methods of Collecting Information

The means and methods of collecting information will also vary according to the phase of evaluation. During pre-linkage planning, interviews with staff, judgments from experts, and data from existing records can be used to provide a focus for linkage activity. During the design of the linkage arrangements, interviews can again be used, and semi-structured questionaires developed. Finally during the implementation phase, interviews, questionaires, and structured assessment devices can also be used to determine program outcomes. Careful record keeping and monitoring data during pilot testing will also facilitate decision making.

In short, a comprehensive evaluation plan will utilize a wide variety of means and methods for collecting data. It is necessary, however, to plan for collecting information. After making a decision regarding the questions of interest, determining how to collect the data becomes a relatively straightforward task.

Summary

The purpose of this evaluation guide is to provide an overall framework for the evaluation of the linkage process. Many decisions are required to implement a linkage program. Evaluation aids decision making. Thus, an effective evaluation plan requires (1) the specification of questions that decision makers revise at certain decision points; (2) the correction of information that would then be (3) analyzed and (4) interpreted in order to (5) provide information to decision makers that they can use in the (6) design and implementation of interorganizational linkage and coordination.

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Appendices

A. Description of the Medical Assistant Program

B. Description of the Volunteer Services Program

APPENDIX A

DESCRIPTION OF THE MEDICAL ASSISTANT PROGRAM

The primary goal of the Medical Assistant Program (MAP) is to introduce students to the responsibilities and skills related to the clinical aide who assists the physician in a private practice or in hospital facilities. Students who have completed training should qualify for entry level positions in the allied health field, medical assistant, hospital employee such as ward clerk, records assistant, admitting clerk and related jobs in private industry. During MAP training the student is introduced to the job requirements of the clinical aide or medical office manager in the assisting, care and treatment of the patient, and learns related marketable skills.

The overall goal of the course is to provide training in skills related to the following areas: (1) sterilizing and preparation of examination trays, (2) assisting in hematology and urology laboratories, (3) the EKG department, (4) reception room, and (5) office of the accounting department (private practice, to include billing, collections, payroll and tax records). The focus of the MAP training includes course work in the following areas: (1) Office Management Unit - including bookkeeping, billing, collections, tax records, payroll and reception routines, and (2) Clinical Assisting Unit - including table-side assisting, instrumentation, laboratory assisting in urinalysis and routine hematology, sterilizing, performing EKG tests and mountings, allied reports, taking of vital signs, and maintaining medical records.

During the course training the following procedures are used to determine how well the student is meeting the goals and objectives of the course:

- Theory tests on a weekly basis using text and practical experience; grade determined by accuracy of performance.
- Laboratory and practical demonstrations of skills conducted by students on a monthly basis; student grade is determined by proficiency of performing skills.

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APPENDIX B

DESCRIPTION OF VOLUNTEER SERVICES PROGRAM

The philosophy of the Volunteer Services Program is to provide the best in volunteer services to Presbyterian Hospital and also to all patients served at, and doctors located in, Pacific Medical Center.

The objectives of the program are as follows:

1. Develop quasi-professional corps of volunteers who can serve in many areas of the hospital.
2. Augment recruitment, with goal of at least 350 "active" volunteers in any given month, by end of fiscal year.
3. Increase percentage of male volunteers and married couples who will volunteer as a team, particularly during evening hours.
4. Present monthly orientations for new volunteers, and quarterly re-orientation/training sessions for all volunteers.
5. Increase community involvement, including promotion of Pacific Medical Center volunteer arm to San Francisco business and philanthropic communities.
6. Improve and develop programs for recognition of volunteers.
7. Develop and enlarge evening volunteer services, with special attention given to Visiting Volunteer and Gift Shop staffing; also volunteer staffing with trained volunteers for Nursing Nodes.
8. Improve image of Presbyterian Hospital's volunteer services in every way possible.

The specific areas of the hospital where student interns are generally placed through Volunteer Services as part of the internship program, depending upon the availability of positions, includes the following departments:

1. Emergency Unit
2. Outpatient Clinic
3. Mail and Escort
4. Medical Staff Office
5. EEG Laboratory